



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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APPLICANT(s): Jokimies, M.

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Appiah, C.

TITLE:

CELL PRIORITISING IN A CELLULAR RADIO SYSTEM

ATTORNEY

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Commissioner of Patents

P.O. Box 1450

Alexandria, VA 22313-1450

ATTENTION: BOARD OF PATENT APPEALS AND INTERFERENCES

# APPELLANTS' BRIEF

This is an appeal from the final rejection of the claims in the above-identified application. A Notice of Appeal was mailed on May 30, 2003. The fees required under 37 C.F.R. §1.17 are being submitted herewith. This brief is being submitted in triplicate. The appendix of claims are attached hereto.

# I. REAL PARTY IN INTEREST

The real party in interest in this Appeal is:
Nokia Mobile Phones, Ltd.

### II. RELATED APPEALS AND INTERFERENCES

None 08/01/2003 AADDF01 00000053 09028726

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# III. STATUS OF CLAIMS

Claims 1-10 are pending in the application.

Claims 1-10 have been finally rejected.

The claims on appeal are 1-10.

#### IV. STATUS OF AMENDMENTS

An amendment was filed under 37 C.F.R. 1.116 and was entered.

# V. SUMMARY OF INVENTION

In brief, the present invention is a cellular radio system (30), terminal (35) and method (Fig. 3) to realize cell prioritization. It features using priority data relating to the terminal (35) in order to favor at least one cell (32a, 33a) based on data specific to that terminal stored in and received from the network.

To the operator managing a cellular radio system, the present invention presents a wide range of possibilities to control cell priorities relating to one device. This is very advantageous, because from the network's point of view all terminals do not behave identically, so that the use of a single standard pattern for all devices would inevitably cause disadvantageous functions in some devices (page 12, lines 1-5).

The invention as defined by the independent claims is:

- 1. A cellular radio system (30), which comprises terminals (35), cells (31a, 32a, 33a, 34a) and a network including stationary network equipment (36, 37), of which said terminals are arranged to set up and maintain radio communication with base stations (31, 32, 33, 34) in the cells, wherein at least one terminal (35) is arranged to favor at least one cell (32a, 33a) based on data specific to that terminal stored in and received from the network (page 5, lines 15-19).
- 4. A cellular radio system terminal (35), which is arranged to set up and maintain radio communication with base stations (31, 32, 33, 34) in cells (31a, 32a, 33a, 34a) of the cellular radio system, wherein the terminal is arranged to favor at least one cell (32a, 33a) based on data specific to that terminal stored in and received from a network (page 5, lines 15-19).
- 6. A method (Fig. 3) to realise cell prioritizing in a cellular radio system (30) comprising terminals (35), cells (31a, 32a, 33a, 34a) and a network including stationary network equipment (36, 37) of which said terminals are arranged to set up and maintain radio communication with base stations (31, 32, 33, 34) in the cells, wherein the method utilizes priority data relating to a terminal in order to favor at least one cell (32a, 33a) based on data specific to that terminal stored in and received from the network (page 5, lines 15-19).

#### VI. ISSUES

- 1. Whether claims 1-3, 4, 6, and 7 are anticipated under 35 USC 102 by Chavez.
- 2. Whether claims 5 and 8 are obvious under 35 USC 103 on Chavez in view of Wang.
- 3. Whether claims 9 and 10 are obvious under 35 USC 103 over Chavez and Wang in view of ETSI.

# VII. Grouping of Claims

The claims do not stand or fall together.

The claims are grouped as follows:

Group I: Claims 1-3, 4, 6 and 7

Group II: Claims 5 and 8

Group III: Claims 9 and 10

#### VIII. ARGUMENT

If one looks carefully at the embodiment described in column 3, lines 16-23, of Chavez, one notes that a key feature thereof is the ability of the network to associate each mobile terminal with a certain tenant. When a certain mobile terminal first attempts registering into the network, the wireless switching system "is responsive to the identification code of wireless terminal 124 to examine an internal table to determine

the tenant to which wireless terminal 124 is assigned" (column 3, lines 16-19). Once the wireless switching system has found an identification of the appropriate tenant, it transmits to the mobile station a tenant-specific list of allowable base stations. Note especially that the list so obtained would be exactly the same for each mobile station (or wireless terminal) assigned to the tenant in question. Typically, there is a larger number of wireless terminals (Chavez, column 2, line 64) and each tenant can designate, which wireless terminals (in plural!) are allowed to be served by certain dedicated bases stations (column 2, lines 52-54).

In other works, the only thing that is terminal-specific in the disclosure of Chavez is the entry in a table that is internal to the wireless switching system. Based on such terminal-specific information the network can select a tenant-specific preference list to be transmitted to the wireless terminal, but the network will never transmit the terminal-specific information because it is only useful to the wireless switching system for the purposes of finding out, which tenant has a certain terminal assigned to it.

On page 2 of the final rejection the Examiner points to a teaching of "wireless Terminal consulting an internal list of base stations on which it is allowed to register" in Chavez. The applicant does not contest the fact that Chavez's wireless terminal consults an internal list. However, such an internal list is not terminal-specific. If and when there are several terminals registered to a particular tenant, which is a condition expressly taught in Chavez as already pointed out

above, each of these terminals receives exactly the same list from the network.

Chavez admittedly discloses storing terminal-specific information in a network. That terminal-specific information is the entry of the terminal identifier in a table that reveals which terminals belong to which tenant. Having obtained that information from the table, the network goes on to look for which base stations are allowable to the terminal of that tenant. The list of base stations is not terminal-specific, it is tenant-specific. Transmitting tenant-specific information to a particular terminal of that tenant does not make the information terminal-specific. It remains tenant-specific even when it resides stored in the memory of a terminal.

It is possible that the Examiner confuses the concepts of "terminal-specific" and "pertaining to а terminal". Terminal-specific means that the information has been created only that one specific terminal in mind. The information is and different unique to that terminal potentially from corresponding information specific to all other terminals. is what the present invention is about. In Chavez and the like, the information about allowable base stations pertains to certain terminals, because it is common to these terminals that they all must behave according to the rules laid down in said pertaining information. But since the rules, i.e., the list of allowable base stations, is the same for all of these terminals, it is not terminal-specific.

The applicant's pending claims clearly require that network to store and transmit to the mobile terminal certain terminal-specific information. In particular, claims 1, 4 and 6 recite

"based on data specific to that terminal stored in received from a network". These limitations are not anticipated by Chavez.

It is therefore requested that the rejection of claims 1-3, 4, 6 and 7 under 35 USC 102 on Chavez be reversed.

Further, since the terminal specific information received from the network is not suggested by Chavez, these claims are unobvious over it.

Wang also fails to disclose this feature. Thus adding it to the Chavez does not result in the present invention. Further, the Examiner has not shown where in the prior art there is a teaching or suggestion to combine these references in the first place as required by <a href="Example Example Dones">Example Example Dones</a>, 62 USPQ 2d 1206, 1208. Therefore the rejection of claims 5 and 8 under 35 USC 103 on these references should be reversed for this additional reason.

Similarly, ETSI fails to disclose the above feature. Thus adding it to Chavez and Wang does not result in the present invention. Also, there is no teaching or suggestion to combine it with the other references. Therefore the rejection of claims 9 and 10 on these references under 35 USC 103 should be reversed for this additional reason.

# CONCLUSION

In conclusion, it would not be obvious to combine the references, and even if the references are somehow combined, the resulting combination will not have data specific to a terminal, which has the advantage of allowing the system operator to set different priorities for different devices.

The appendix of claims is attached hereto. A check in the amount of \$320 is enclosed herewith for the appeal brief fee. The Commissioner is hereby authorized to charge payment for any additional fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

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#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date indicated below as first class mail in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Attention: BOARD OF PATENT APPEALS AND INTERFERENCES

Date: 7/29/03

Signature:

Person Making Deposit

#### IX. APPENDIX OF CLAIMS

The texts of the claims involved in the appeal are:

- 1. A cellular radio system, which comprises terminals, cells, and a network including stationary network equipment, of which said terminals are arranged to set up and maintain radio with base stations in the cells, wherein at least one terminal is arranged to favor at least one cell based on data specific to that terminal stored in and received from the network.
- 2. A cellular radio system according to claim 1, wherein the stationary network equipment comprises a database for storing cell priority data relating to individual terminals.
- A cellular radio system according to claim 2, wherein stationary network equipment is arranged to supply information to the terminal about priority data stored in the database relating to the terminal, as a response excitation, which is one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in said database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal.
- 4. A cellular radio system terminal which is arranged to set up and maintain radio communication with base stations of the cellular radio system, wherein the terminal is arranged to favor at least one cell based on data specific to that terminal stored in and received from a network.

- 5. A terminal according to claim 4 which is further arranged to maintain a list of possible cells for cell reselection and to arrange said list in an order which is based on a parameter calculated for each cell, wherein, for priority cells the terminal is arranged to alter the parameter calculation relating to the cell, so that said parameter has a particularly advantageous value in the case of a priority cell.
- 6. A method to realise cell prioritizing in a cellular radio system comprising terminals, cells and a network including stationary network equipment of which said terminals are arranged to set up and maintain radio communication with base stations in the cells, wherein the method utilizes priority data relating to a terminal in order to favor at least one cell based on data specific to that terminal stored in and received from the network.
- 7. A method according to claim 6, wherein the priority data relating to a terminal is stored in a database of the stationary network equipment, and the priority data is transmitted to the terminal as a response to an excitation, which is one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in said database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal.
- 8. A method according to claim 6, in which a terminal further maintains a list of possible cells for cell reselection

and arranges said list in an order based on a parameter which is calculated for each cell, wherein for priority cells the terminal alters the parameter calculation relating to the cell, so that said parameter has a particularly advantageous value in the case of a priority cell.

- 9. A method according to claim 8, wherein the priority data relating to a terminal comprises at least the priority cell identity and information about whether or not the terminal shall apply an offset parameter, a delay factor relating to the cell, and cell reselection hysteresis in the calculation of the parameter relating to a priority cell.
- 10. A method according to claim 9, wherein the terminal does not apply the delay factor relating to the cell nor the cell reselection hysteresis when the terminal calculates the parameter relating to a cell, in a situation where cell reselection represents shifting from a non-priority cell to a priority cell.